

App No.:

Inventors:

Title:

09/009,802

Sean McCarthy

Novel CRSP-2 Protein...

FIG. 1A

10 67 30 50 187 90 110 150 487 70 130 170 547 190 307 367 427 607 ာ အီင ATG GAA TTA E GAG GCT H D GAC CCA TGT Д Σ Н TCG CIG CTG GAG GTG AAC I ATC TCA I CAG Ŋ Ø Z S > GCA ACC BCG ACC ATC TIL TGC Ø Ø H H Z ACC GCG CIC AGC CIG GTC TGC ACC GAC AAT Ø ы Н Ω S Z > ပ ACG GGA ACC ည္ပည AAT ATG GAG AAC TAC H ĸ Σ × Ö H z Z 되 SCG ည္ဟမ္ TTG GTG GGA CAG IGI CA A CAC Н ပ Ø ט Д > r H CIT GCT GAG AAA GAA GTT GGA AGC TGC TTC Ø > ပ 回 M 闰 Ö ß Ŀ CGG CCC GAG AAG GAG CAC AGG S TCA ACT AGC 24 ш Н K ø ß ഥ 团 E CAG 929 CAG CAG ACG CAG s TCA AGA ည္ဟမ္မ AGT Ø Ø Oì K S ø Ø H ĸ ATG CCG ACG GAC GAC ပ္ပပ္ပ GCA AAC GGC TTT Σ Д H Ø Ω O اعآ Ω GGCACGAGGGGGGGGGGGGGCGCAGAGCGGAG ည္ဟ TAC GAC AAA ACA AAC CAG CGG GAA O æ Ω H 国 K ACG GAG AGC GCT AAC ACC ACC GAA TGC Ø z ပ Ħ Ø 딥 H 国 CCC ATG ACC ATA TAC TGC CIC GCT GAC П $\mathbf{\Sigma}$ Ø Ω × Ö Ħ GIC CTG GAG AAG ATG CIC GCT GGA GCT ¥ н Ø 闰 Ö Σ Н K 909 ATG SCG GAA GAA AAT CAC GTG AGC Σ Д ഥ Z > ß 回 H 909 AGG GAG CAC GGC GAA ATT TCT Ħ ß ps; G 闰 ഥ а gce CAG ညည GCA TAT GAA ACA 999 GTT щ > K × r O 团 H CTG AAG GAG GAG AGC CGA GGC ATC 国 S Н G 闰 ၁၅၁ GTC ATG CGC CAC GTT GAC 04 Σ ы > ĸ CTG FTTC GAG CCT GTG ACA GAG TGC ບ 闰 H > ഥ

<u>f</u> 1B

210 667	230	250	270 847	290 907	310 967	330 1027	350 1087	351 1090
N AAC	V GTG	D GAC	ဗဗ	9 9	V GTT	E	I	
D GAC	PCCT	L CTG	S AGT	V GTG	E	TACT	e Gag	
c TGT	F TTC	L	₽ GCC	F	Y TAT	L	GAA	. సే
I ATC	L	R	c TGT	T	e Gag	S AGC	R AGG	•
TACC	L	SAGC	P	P CCG	D GAT	R AGG	GGA	
9 9	ອ	A GCC	C TGC	K AAG	P CCC	E GAG	L CTG	
N AAT	R AGA	P CCC	R CGA	C TGC	V GTC	L	L	
s AGC	Q CAG	D GAC	D GAC	v GTG	e Gag	D GAC	A GCA	
ာဗဗ္ဗ	F	H	L TTG	Y TAT	R AGA	e Gag	A GCT	
r Agg	A GCC	C TGC	A GCC	v GTG	P CCC	L CTG	A GCC	
TACC	C TGT	L	G GGA	L CTG	L	e Gag	A GCC	
A GCC	C TGC	e Gag	D GAT	s AGC	L	Q CAG	A GCT	
M ATG	L	වූ	CCT	H	I	R CGC	A GCG	
K AAA	9 9	EGAG	e Gag	s AGC	e Gag	V GTG	PCCT	
T ACC	P	v GTG	L	H	9 9	e Gag	E	
c TGC	Q CAG	P CCC	e Gag	PCCC	D GAT	e Gag	L	
H	c TGC	L	W TGG	Q CAG	Q CAA	M ATG	L	
G GGT	DGAC	PCCC	TACC	C TGC	DGAC	FTC	A GCG	
W TGG	R AGG	TACA	I ATC	L CTC	R CGT	s AGC	M ATG	
v GTC	Q CAG	C TGC	L	L	SAGC	ဗဗ	e Gàg	* TAG

09/009,802 Novel CRSP-2 Protein...

Sean McCarthy

App No.: Title:

Inventors:

FIG. 1C

2196 1248 1406 1485 1564 1643 1722 1801 1880 1959 2038 2117 1327 CAGTACTTAGGTAATTGTAGGGCGAGGATTATAAATGAAATTTGCAAAATCACTTAGCAGCAACTGAAGACAATTATCA CTCGTCCATCAGGGATTTCAGAGGCTCAGAGACTGCAAGCTGCTTGCCCAAGTCACACAAGTTAGTGAAGACCAGAGCAG **ACTETCCCTCTTTGGCAGTTGCATTAGTAACTTTGAAAGGTATATGACTGAGCGTAGCATACAGGTTAACCTGCAGAAA ACCAGGCTTCTTCCTACATCTTCTCCCAGTAAGTTTCCCCTCTGGCTTGACAGCATGAGGTGTTGTGCATTTGTTCAG** CACCCCTGTCCAGATTATTGGCTGCTTTGCCTCTACCAGTTGGCAGACAGCCGTTTGTTCTACATGGCTTTGATAATTG TGCAAACATCAACCTGGCAAAAATGCAACAAATGAATTTTCCACGCAGTTCTTTCCATGGGCATAGGTAAGCTGTGCCT TCAGCTGTTGCAGATGAAATGTTCTGTTCACCCTGCATTACATGTGTTTTATTCATCCAGCAGTGTTCAGCTCTAC TITCATCIGGITGIGACTCTAAGCTCAGTGCTCTCTCTCCACTACCCCACAGGCCTTGGTGCCACAAAAGTGCTCCCC <u> aaaaggaagaaggaattttttttttgaggcatgcacatctggaattaaggtcaaattcaaattctcacatctta</u> **AAAGTAAACTACTGTTAGGAACAGCAGTGTTCTCACAGTGTGGGGGCAGCCGTCCTTCTAATGAAGACAATGATATTGAC** TTTGAGGGGAGAGATGGAAACAATGTGGAGTCTCCCTCTGATTGGTTTTGGGGAAATGTGGAAAAGAGAGGAGTGCCTGCTT

App No.:

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Title:

09/009,802

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Novel CRSP-2 Protein...

FIG. 1D

2275 2433 2479 2354 **ACCACGTGGAGAAAATCAAACCGAGCAGGGCTGTGTGAAACATGGTTGTAATATGCGACTGCGAACACTGAACTCTACG** GCACATGATTGTATAAGCATGCTTTTCTTTGAGTTTTAAATTATGTATAACATAAGTTGCATTTAGAAATCAAGCATAA CCACTCCACAAATGATGTTTTCAGGTGTCATGGACTGTTGCCACCATGTATTCATCCAGAGTTCTTAAAGTTTAAAGTT

App No.: Title:

Inventors:

09/009,802 Novel CRSP-2 Protein...

Sean McCarthy

FIG. 2A

GAATTCGGCACGAGACGACGTGCTGAGCTGCCAGCTTAGTGGAAGCTCTGCTCTGGGTGGAGAGCAGCCTCGCTTTG

8 148	28 208	4 8 2.68	68 328	88 388	108 44 8	128 508	148 568
9 999	S AGC	N AAT	ი გენ	D GAT	D GAT	K AAG	T ACT
L (CTG G(R AGG	C TGC	R CGT	N AAC	CAA	r Agg	R AGA
L]	I ATC	D GAC	C TGT	v GTG	E	K AAA	L CTG
V GTC C	N AAC	T ACG	T ACA	c TGT	D GAT	ا ک	C TGT
A GCC G	N AAC	DGAC	A GCT	L CTC	L	CAA	S AGT
№ 929	F	S	C TGT	TACA	Q CAG	N AAC	E GAA
V GTG G	D GAC	L CTG	F	9 9	R AGG	E	6G A
M ATG G	L	C TGC	P	PCCT	E	Q CAG	E G A G
	V GTC	Q CAG	K AAG	C TGC	L	v Gec	Q CAA
TGAA	L CTG	STCA	e Gag	င TGC	I ATA	PCCA	GGA
GGAT	A GCT	ງ ອ	D GAT	M ATG	P CCA	B	K AAG
ဗီသည	G GGA	K AAG	ი ცი	₽ GCC	TACC	ල ලිලිලි	r Agg
G A GC	L CTG	R CGG	PCCC	D GAT	A GCA	TACT	ဗဗ
CCAG	P	A GCC	CAG	R CGA	D GAT	T ACA	CAA
LCC	S TCT	999	L	Q CAG	e gaa	GGA	S TCA
GGGA	C TGC	H	ဂ 760	C TGC	M ATG	E GAA	K AAA
GTGACGCACAGTGCTGGGACCCTCCAGGAGCCCCGGGGATTGAAGG	L	L CTG	F	R AGG	T ACG	A GCA	K AAG
	W TGG	D GAC	K AAG	R AGG	T ACT	H	IATE
ACGC	S AGC	A GCT	R AGA	R CGG	C TGT	T ACA	s AGT
GTG	L	S TCT	T ACC	L TTG	V GTT	ဗဗ	P CCA

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App No.: Title: Inventors:

FIG. 2B

168 628	188 688	208 748	225 799	
PCCA	P CCA	S AGC		
K AAG	A GCT	TACC		
C TGT	O CAA	L TTG		
I ATT	A GCT	Q CAA	* Taa	
K AAA	TACT	SAGC	L	
TACG	DGAC	R CGA	k Aag	
W	K AAA	C TGT	E GAA	
F TTT	H	L CTG	IATA	
H CAT	999 9	L CTA	K AAA	KKKKI
R CGT	R Aga	G GGA	CAA	KKKKI
A GCT	R AGA	PCCT	C TGC	KKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKK
C TGT	S	9 9	V GTA	DADA
C TGC	c TGC	C TGT		
L	V GTC	DGAC	L	ACA.
GGA	CAG	c TGC	R CGA	
PCCT	GGA	r cgt	GCT	i A A Gi
ဗ ၁၅၅	E	Q CAG	CAT	4
C TGT	L	F	O CAG	ATATTCCACAT
D GAC	L	IATC	മ	
F TTT	V GIC	E Gaa	NAAT	ATA

App No.: Title:

Inventors:

09/009,802 Novel CRSP-2 Protein...

Sean McCarthy

09/009,802 App No.: Title:

Novel CRSP-2 Protein...

Sean McCarthy Inventors:

79	16 140	36	56	76 320	96 380	116 440	136 500	156 560
rctt	MÄTG	V GTT	PCCA	T ACC	Y TAC	K AAG	GGA	E GAA
CICCCI	A I GCG A:	S TCG	H CAC	Q CAG	E GAG	R AGG	N AAT	T ACT
TTCT(N AAC	GGG	Y TAC	D GAT	C TGC	K AAA	I ATC
TTCI	T OTC	L TTG	A GCG	K AAG	T ACT	A GCC	C TGC	T ACC
CTCI	r F C TTT	T ACC	A GCT	N AAT	9 9	CIC	Y TAC	E GAA
TTTI	V V	A GCC	9 GGC	999	C TGC	C TGT	N AAT	E GAG
GTCP	R CCGG	S AGC	299 9	9 9	E GAG	I ATC	GGG	I ATT
GACG	A T	V GTG	Γ	P	E GAG	Q CAA	P	E GAA
aaag1	G A GGA GCT	GGA	P	Y TAC	D GAC	V GTG	C TGC	G GGA
lTGC/	A (GCG G($_{ m L}$	P CCA	L	E GAG	G GGC	C TGC	R CGA
YGGCI	A A GCA G(L	P	I ATC	A GCA	A GCA	M ATG	${ m F}$ TTC
ACCC/)9 299 1 9	PCCT	$_{ m CTG}$	G GGA	C TGC	D GAC	A GCT	H CAT
36667	L (CTG G(H CAC	N AAC	P	PCCG	G GGG	H CAC	N AAT
CGTO		9 66C	K AAG	A GCG	Y TAC	G GGA	R CGT	Q CAA
GTT.	M A ATG GCT	C C	I ATC	A	P CCG	R CGC	M ATG	D GAT
CCGGACGCGTGGCCGCCACGGTTTCGTGGGGACCCAGGCTTGCAAAGTGACGGTCATTTTCTCTTTTCTTT		L	A GCT	S AGC	OCAG	TACC	C TGC	S TCT
	Ø	A GCT	N AAC	V GTC	Y TAC	P	R CGC	s TCT
	rctg.	A GCG	S	A GCA	N AAC	S AGT	K AAA	V GTG
	GAGTCCTTĊTGAG	A GCG	N AAT	S TCT	D GAC	A GCT	R CGA	C TGC
)922	GAG1	V GTA	L	299 8	I ATT	C TGC	R CGC	I ATA

FIG. 3B

176	196	216	236	256	267
620	680	740		860	893
S	A	E	R	N	
TCA	GCC	GAA	CGT	AAT	
S	C	K	Q	S	
TCT	TGT	AAA	CAG	AGT	
$^{ m L}_{ m TTG}$	D GAC	L CTG	${ m F}$	A GCC	
T	S	V	I	Q	
ACC	TCA	GTC	ATA	CAA	
T	S	P	E	H	
ACC	TCA	CCT	GAA	CAT	
R	R	K	L	H	
AGA	CGG	AAA	CTA	CAC	
R AGA	Γ	C TGT	G GGA	D GAT	
SHCC	C TGT	I ATC	H CAT	K AAA	
Y	V	K	S	Q	
TAT	GTT	AAG	TCT	CAG	
	S	S	9	I	*
GGG	TCT	TCC	9	ATA	TAA
D	G	W	K	R	H
GAT	GGT	TGG	AAA	CGG	CAC
$_{ m L}$	E GAA	FTC	R AGA	C Tec	R AGA
TACC	Q CAA	H CAC	R AGG	S TCT	OCAG
S	G	R	H	L	C
AGC	GGA	AGA	CAT		TGT
H	K	A	K	GGT	T
CAT	AAA	GCT	AAG		ACT
D	T	C	T	E	H
GAT	ACC	TGT	ACC	GAA	CAC
N AAT	H CAC	$^{\mathrm{C}}$	$^{\mathrm{C}}$	G GGA	L
GGT	Y TAT	$_{ m L}$	V GTG	C TGT	R AGG
F	M ATG	G GGA	Q CAA	$\overset{\mathrm{Y}}{\mathtt{TAC}}$	S TCT
S AGC	K AAA	S TCA	GGT	$^{ m C}$	S TCT

App No.:

Title: Inventors: 09/009,802

Sean McCarthy

Novel CRSP-2 Protein...

1288 1525 1209 1446 1130 1367 1051 CCTAAGGATATACAAGTTCTGTGGTTTCAGTTAAGCATTCCAATAACACCTTCCAAAAACCTGGAGTGTAAGAGCTTTG TTTCTTTATGGAACTCCCCTGTGATTGCAGTAAATTACTGTATTGTAAATTCTCAGTGTGGGCACTTACCTGTAAATGCA ATGAAACTTTTAATTTTTTTTTTGTAAAGGTGCTGCACTGCCTATTTTTTCCTTGTTATGTAAATTTTTGTACACATTGA TTGTTATCTTGACTGACAAATATTCTATATTGAACTGAAGTAAATCATTTCAGCTTATAGTTCTTAAAAGCATAACCCT TTACCCCATTINATICTAGAGTCNAGAACGCAAGGATCTCTTGGAATGACAAATGATAGGTACCTAAAATGTAACATGA AAATACTAGCTTATTTTCTGAAATGTACTATCTTAATGCTTAAATTATATTTCCCTTTAGGCTGTGATAGTTTTTGAAA **ACCAGCTATCCAAAATGCAGTGAACTCCTTTTATATAATAGATGCTATGAAAACCTTTTATGACCTTCATCAACT**

09/009,802 Novel CRSP-2 Protein...

Sean McCarthy Inventors:

9 180 240 100 300 120 360 140 420 160 480 W TGG $\frac{L}{TTG}$ IGC P GGA K AAG AAA G × F I ATT I ATC K AAG A GCC D GAC C TGC S AGT E GAA H CAT TCTP H CAC H CAT R CGC H CAT Q CAG R CGT P N AAC G GGG Q CAA CTGာ ကြီ 口 S TCA C TGT C T ACC K AAA A GCT K AAA CGC GGA G GTG $_{
m L}$ C TGT CAA M ATG $_{\rm TAC}^{\rm Y}$ I ATA T ACC AAG > \propto H CAT I ATC 9 GGC H CAT H CAT C TGC $_{\mathrm{TGT}}^{\mathrm{C}}$ 3CG CAC Ø ညည S AGC L D GAT G GGT S TCA F TTT V GTC $^{\rm C}$ AGT E GAA H CAC G GGG GAC R AGA R CGA M ATG E GAA Ω CAC T ACT A GCC H CAC N AAC K AAG E GAA G GGG IGC Ö Η T ACT K AAA V GTT R CGA I ATT Q CAG C IGC R CGT Ö s TCC C TGC **LAT** D GAT H CAC R CGC P CCA H Q CAG S TCC AGG I ATC P CCA D GAC F TTC K AAG R AGA L Y TAC K AAG ATT 366 $^{\mathrm{C}}$ CAC GTG R AGA S TCA Н Η > TACC GAA I ATC GGA S TCA V GTT K AAA R CGG P CCA [고] A GCC AGG R AGA 9 66C TACT L CTA R CGA K AAA $\frac{L}{CTG}$ ACG GAT R CGG GGT N AAT $_{
m L}$ C TGC 999 N AAT Ω Ŋ G K AAA I ATC 3GC Q CAG C IGC H CAT $_{\rm TGT}^{\rm C}$ N AAT D GAT w TGG TTC $\overline{\mathbf{W}}$ VGTG $^{\rm C}$ $_{
m L}$ PCCC AAA S TCT × T ACC G A GCT GGA D GAC E GAA M ATG R CGC

698 TCACCATTGAGGAACATCATCAATTGCAGACTGTGAAGTTGTGTATTTAATGCATTATAGCATGGTGGAAAATAAGGTT

540

TGA

AAA

Inventors:

09/009,802

Novel CRSP-2 Protein...

317

ATG

CCC

ညည

TIC

AGC

GAC

ATA

GGC

CGG

CTT

AAC

GGT

CCT

Δ,

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101 377 121 437

Sean McCarthy

17

137 21 41 197 257 61 81 CIC S AGC AAA M 7 CTC GAG CTG Н Ö 国 Н CTG CAA TIC н Ø Ŀ 24 CTG ညည CIL П Ø Н Ēų CIG GAC CGA Н Ω Ω × GTC GCT AGC > K Σ S CTG GAT TTC П ſΞŧ Ω Д CTG CAT GGC П A H Ö CAT I CAA s TCT H Ø CGG CCT CIC ĸ Д Н Īτι AGG GCT CTA L TTA Н æ K GCA GCA AGC K K S Ø CCC CAG GCT Д Ω K Õ ည္ဟ TCC CTC K ß П H CCT CCC Д М r Ç CCA ATC ACA Д H H ĸ GIG TCC CTC Ø > L П CTG ၁၁၅ GGT L CTG 1 G GAA ACC TTG 闰 H Н Z GGA TCT s TCC G ល O

S TCC CIC GGC r CTC CGG ACC Ħ H AAC TIC H Z GAC AAC Z > 999 r E. L CTG Ü CAG H CAC H M GAG 闰 z Q CAG Ω AAC z Н GAG 回 Σ GAG 闰 M AAA Ω K CAC $\boldsymbol{\vdash}$ Щ TAC O) × AAC П Z GGG Ö Щ

E GAG s TCC GTA > AAG ATC K CTG TTG Н GTG GAT Ω GAG GGT G GGA GAG 旦 ACA TTC Ŀ AAG AGC S AAC GGG r GAC GAG 团 ACC GCG Ø ATG CCA а AAG CAA Oi GAC ATT ATC TCC Ø CAG GCA Ø CIC GTG > CAC GTG > AGC AAT Z

ACA H CAC 田 TIC بعا AGC S GAC Ω ACG H ပ္ပင္ပ Ø AAG CAG 0 ATC H ည္သ щ GTA > CTG Н ည္ဟ K GAG 回 AAG K GAG 国 GAG 闰 ATG Σ AGG ø

181 617 CAG O) CAC Н ICC ß AGG 24 CGG æ 24 CCA Д CTG Н AAG M ATT Н ATC Н TGG 3 TTC Ŀ gcc A GTG > CGG 24 ည္သ Д CAT н CTC H GAA 团

161

557

CGG

09/009,802 Novel CRSP-2 Protein... Sean McCarthy App No.: Title:

Inventors:

882

928

201 677	221 737	241	243 803
R CGG	S	Q CAG	
I ATC		R CGG	
₽ GCC	s Agc	S TCT	
Q CAG	E	A CCC	
L	T ACC	R AGG	
R CGC	9 9	L	
H	e Gag	I ATC	
R CGA	E	Y TAC	
K AAG	L	L	
E	V GTC	L TTA	
SAGC	D GAC	H	
LCTC	K AAG	T ACC	
W	H	K AAG	
H	T ACC	R CGA	
ဗဗ္ဗ	უ ე	P	
ပ္ ၁၅၅	K AAG	S TCC	
E GAG	R CGC	$_{ m CTG}$	
L CTG	L	R AGG	
A GCC	GGA	S TCC	* TAG
GAT	D GAT	H	L

TACATCTAAAAAAAAAAAAAAAAAAAAAAATTGGCGGCCGC

09/009,802 Novel CRSP-2 Protein... Sean McCarthy

Inventors:

FIG. 6A

crsp-2h crsp-3h crsp-4h tango59 Consensus	MQRLGATLLCLLLAAAVPTAPAPAPTATSAPVKPGPALSY	40
crsp-2h crsp-3h crsp-4h tango59 Consensus		80
crsp-2h crsp-3h crsp-4h tango59 Consensus		120
crsp-2h crsp-3h crsp-4h tango59 Consensus	PLGALVLDFNNIRSSADLHGARKGSQCLSDTDCNTRKFCL AVSAAPGILYPGGNKYQTIDNYQPYPCAEDEECGTDEYCAEFGTRVGRYCH NQTGQMVFSETVITSVGDEEGRRSHECIIDEDCGPSMYCQ a s r C DedCgt YC	160
crsp-2h crsp-3h crsp-4h tango59 Consensus	QPRDEKPFCATCRGLRRRCQRDAMCCPGTLCVNDVC SPTRGGDAGVQICLACRKRRKRCMRHAMCCPGNYCKNGIC SPHQGSSACMVCRRKKKRCHRDGMCCPSTRCNNGIC FASFQYTCQPCRGQRMLCTRDSECCGDQLCVWGHC SP q a C CRg RkRC RDaMCCPgtlCvNGiC	
crsp-2h crsp-3h crsp-4h tango59	TTMEDATPILERQLDEQDGTHAEGTTGHPVQENQPKR VSSDQNHFRGEIXETI.TESFGNDHSTLDGYSRR IPVTESILTPHIPALDGTRHRDRNHGHYSNHDLGWQNL TKM	
crsp-2h crsp-3h crsp-4h tango59 Consensus	* * * * * * * * * * * * * * * * * * *	240

09/009,802

Novel CRSP-2 Protein...

Inventors:

Sean McCarthy

FIG. 6B

	* * *	
crsp-2h	CKPVLLEGOVCSRRGHKDTAQAPEIFORCDCGPG	
crsp-3h	CKPVLKEGOVCTKHRRKGSHGLEIFORCYCGEG	
crsp-4h	CKPVLHQGEVCTKQRKKGSHGLEIFQRCDCAKG	
tango59	CTPLPVEGELCHDPASRLLDLITWELEPDGALDRCPCASG	
_		320
Consensus	CKPVL EGqVCtk r Kg shglEIFQRCdCa G	320
	*	
crsp-2h	LLCRSQLTSNRQHARLRVCQKIEKL	
crsp-3h	LSCRIQKDHHQASNSSRLHTCQRH	
crsp-4h	LSCKVWKD.ATYSSKARLHVCOKI	
tango59	LLCQPHSHSLVYVCKPTFVGSRDQDGEILLPRE	
Consensus	LsCr gkds s aRLhVCQki	360
Compensus	Bot quas s andivegut	900
0.1		
crsp-2h	• • • • • • • • • • • • • • • • • • • •	
crsp-3h	•••••	
crsp-4h		
tango59	VPDEYEVGSFMEEVRQELEDLERSLTEEMALREPAAAAAA	
Consensus		400
crsp-2h		
-	• • • • • •	
crsp-3h	• • • • • •	
crsp-4h	• • • • • •	
tango59	LLGREEI	
Consensus	406	

09/009,802 Novel CRSP-2 Protein... Sean McCarthy

Inventors:

FGTCGACCCACGCGTCCGCTGTGGCAGCCCAGCTACCGGTCGTGACCAGATCCAGCTTGCAGC

79	12 145	32	52 265	72 325	92 385	112 445	132 505	152 565	172 625
ATTC	L CTG	A GCG	R CGA	MATG	P CCC	H CAC	V GTC	D GAC	R CGG
CAGCTTTGTTCATTC	T ACA (P	F TTT	EGAG	PCCT	v GTG	T ACA	E GAA	င TGC
CTTT	C TGT	T ACT	M ATG	e Gag	L TTA	H	E	D GAT	P CCA
TC A G	L CTG	W	e Gag	V GTG	S AGC	v GTC	S TCT	I ATT	Q CAG
CAGC	L TTG (T ACT	N AAT	A GCC	A GCA	TACA	F TTT	I ATC	၁ ၁၅
necccaeciaccesiceieaccaearccaecrrg	IATT	V GTC	L	S AGT	L	N AAC	V GTC	c TGT	TACC
CCAG	GGT S	T ACG	T ACG	ස	N AAC	N AAT	V GTG	E GAA	Y TAC
AGAT	9999	P CCG	A GCT	L	V GTG	G GGA	Q CAG	H	K AAG
SACC.	L	S TCC	E	K AAA	E	V GTG	G GGA	s AGC	F
TOOL	R CGG	PCCT	e Gag	H	S	R AGG	S AGT	r Agg	S AGC
9 9	CAG	A GCT	Q CAG	Q CAG	S	T ACC	Q CAG	r AAG	S
41 09.	M ATG	CCT	PCCT	TACT	T	E	N AAC	၁၅၅	F
5	CAAAC	AGCT	Y TAC	DGAC	K	T ACG	N AAC	E GAA	Q CAG
	AACA	TACT	N AAC	GAA	A GCT	S AGC 1	T ACC 7	E GAA	C TGC
	ອອວອ	F CCC	L	MATG	A GCT	T ACC	I ATA	D GAT	Y TAC
) הלכו	CAGC	VGIC	GCT	L	A GCA	E	K AAG	უ ეტე	R AGG
	ວອອວ	₽ GCG	P CCA	EGAG	E	N AAT	H	v GTA	T ACC
	ອອວອ	A	၁၅၅	EGAG	E	H	V GTT	S TCT	P
	GAATTGGGCGGCGGCCAGCGCGGAA	₽ . GCG	P CCG	V GTG	A GCG	Y TAT	E GAA	TACA	ტ ტტტ
10.3	GAA	L	E GAG	GAG	E	N AAC	Q CAG	I	C TGT

FIG. 8E

App No.: 09/009,802
Title: Novel CRSP-2 Protein...
Inventors: Sean McCarthy

192 685	212 745	232 805	252 865	272 925	292 985	312 1045	332 1105
W TGG	R AGG	T ACA	I ATC	L	H	၁၅	M ATG
A GCC	Q CAG	င ၁၅	r Circ	CIC	s Agc	V GTT	EGAG
C TGT	N AAC	V GTG	D GAT	၁၅၅	ဗ	DGAT	o Cag
L	D GAC	P	L CTG	s Agt	V GTG	E	₽
Q CAG	C TGT	F TTC	L	₩	F	Y TAC	L
D GAC	IATC	L CTG	o Cag	င TGC	A GCC	E GAG	s AGC
с GGA	T ACC	L CTG	S AGC	P	PCCA	D GAT	R CGG
C TGT	ව	ဗဗ	TACC	C TGC	K AAG	P	e Gag
C TGC	n AAT	R AGA	P CCC	R CGA	င TGC	₽	1 CTG
E	ວ ອ	Q CAA	D GAC	D GAC	M ATG	e Gag	D GAC
S A GT	G GGT	FTTC	H	L TTG	Y TAC	R Agg	E GAA
D GAC	K AAA	₽ GCC	င TGC	A GCT	V GTG	PCCC	L CTG
R CGA	T ACC	C TGT	L	GGA	LCTG	L CTG	e Gag
ACC	A GCC	c TGT	EGAG	E GAA	S AGT	O CAG	CAG
C TGC	K AAG	L CTG	G GGA	PCCT	H	s Agc	ಸ
L	CAA	၁၅၅	e Gag	e Gag	s AGC	E GAĞ	V GTG
MATG	T ACC	PCCT	V GTG	L CTG	H	E GAG	GAA
Q CAG	C TGC	Q CAG	CCC	E	P CCA	S AGT	9 9
O CAG	H	C TGC	CIG	W	Q CAG	H CAC	I ATA
D GAC	GGT	D GAT	P CCC	ACC	C TGC	D GAC	FITC

FIG. 8C

1238 350 1159 1317 1396 1475 1712 1554 1633 1870 1791 1949 **AATGGCCGCAGCTCCTTCCCAGTAGCTTTTCCTCTGGCTTGACAAGGTACAGTGCAGTACATTTCTTCCAGCCGCCCTG** TTGTTCTTCATGGATGGATTTTGTTTGAAGGGAGGATGGGAAGGGGTGAAGTCTGCTCATGATGGATTTGGGGGA TACAGGGAGGAGGATGCCTGCCTTGCAGACGTGGACTTGGCAAAATGTAACCTTTGCTTTTGTCTTGCGCCGCCCCCAT GGGCTGAGGCAGTGGCTACACAAGAGCTATGCTGCTCTGTGGCCTCCCACATATTCATCCTGTGTTTTCAGCTCCTACC TCACTGTCAGCACAGCCCTTCATAGCCACGCCCCCTCTTGCTCACCACAGGCGAGGGGGACCAGAGGGGACTTCTCT CCTTTGGTTTAATTATTTTCTCCTTCAAGGCACGCCTGCCACTAAGGTCAGGCTGACTTGCATGTCCCTCTAACGTTCG TAGCAGTGTGGTGGACACTGTCTTCCACCGACTGCTTCAATACCTCTGAAAGCCAGTGCTCGGAGTGCAGTTCGTGTAA TAG GAG GAG GAG ATT 回 回 GGA ည္ပမ္ CCT GCC CCT GTG GAG TCA CTA Н S ഥ > Д K Д 999 Ö GAG ы Ŀ

App No.:

Inventors:

Title:

09/009,802

Sean McCarthy

Novel CRSP-2 Protein...

FIG. 8D

2186 2265 2344 TATTAAAATTGAAAGTTGCACACATTTGTATAAGCATGCCTTTCTCCTGAGTTTTAAATTATATGTATACACAAACATG TCCCCTTCATGCAAAAAAAAAAAAAAGGGCGGCCGC

App No.: Title:

2381

Inventors:

09/009,802 Novel CRSP-2 Protein...

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